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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number Substitute for form 1449A/PTO Complete if Known APPLICATION NUMBER 10/645,306 INFORMATION DISCLOSURE FILING DATE 08/21/2003 STATEMENT BY APPLICANT FIRST NAMED Choi et al. MAR 2 8 2005 **INVENTOR Group Art Unit** <del>1763</del> 173a use as many sheets as necessary) **Examiner Name** TENTONIE TENTONIE Sheet of 1 6 Attorney Docket Number P86-28-03

				U.S. PATENT DOCUMEN	TS	
Examiner Initials*	Cite No.1	U.S. Patent Do	Kind Code <sup>2</sup> (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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LBT	B1	6,234,379	B1	Donges	5/22/2001	· · · · · · · · · · · · · · · · · · ·
	B2	6,309,580	B1	Chou	10/30/2001	
	В3	6,391,217	B2	Schaffer et al.	5/21/2002	
	B4	6,696,220	B2	Bailey et al.	2/24/2004	·
<del> </del>	B5	2004/0007799	A1	Choi et al.	1/15/2004	·
	B6	2004/0021254	A1	Sreenivasan et al.	2/5/2004	·
	B7	2004/0021866	A1	Watts et al.	2/5/2004	1
	B8	2004/0022888	A1	Sreenivasan et al.	2/5/2004	
	B9	2002/0177319	A1	Chou	11/28/2002	
	B10	6,713,238	B1	Chou et al.	3/30/2004	
	B11	2004/0008334	A1	Sreenivasan et al.	1/15/2004	
	B12	2004/0009673	A1	Sreenivasan et al.	1/15/2004	<del></del>
	B13	2004/0124566	A1	Sreenivasan et al.	7/1/2004	
	B14	6,646,662	B1	Nebashi et al.	11/11/2003	
	B15	6,776,094	B1	Whitesides et al.	8/17/2004	
	B16	6,518,189	B1	Chou	2/11/2003	
V	B17	2002/0132482	A1	Chou	9/19/2002	
LBT	B18	2002/0167117	A1	Chou	11/14/2002	

Date Considered	08/02/2005

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INIT		l Dicci c	\CUDE	APPLICATION NUMBER	10/645,306	
	ORMATIOI ATEMENT I			FILING DATE	08/21/2003	
517	A I EIVIEIVI	DI APPL	ICANT	FIRST NAMED INVENTOR	Choi et al.	
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Sheet	2	of	6	Examiner Name	Unassigned TENTONI	
	<u> </u>			Attorney Docket Number	P86-28-03	

				U.S. PATENT DOCUMEN	TS	
Examiner Initials*	Cile No.1	U.S. Patent Do	cument Kind Code <sup>2</sup> (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Cotumns, Lines, Where Relevant Passages or Relevant Figures Appear
LBT	B19	6,482,742	B1	Chou	11/19/2002	
	B20	2003/0080471	A1	Chou	5/1/2003	
	B21	2004/0036201	A1	Chou et al.	2/26/2004	
	B22	2004/0192041	A1	Jeong et al.	9/30/2004	
	B23	6,753,131	B1	Rogers et al.	6/22/2004	
	B24	6,828,244	B2	Chou	12/7/2004	
	B25	6,809,356	B2	Chou	10/26/2004	
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	B34	2002/0042027	A1	Chou et al.	4/11/2002	
V	B35	2004/0170771	A1	Bailey et al.	9/2/2004	
LBT	B36	6,580,172	B2	Mancini et al.	6/17/2003	

Examiner		Date	
Signature	LEO B. TENTONI	Considered	08/02/2005

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Sheet	3	of	6	Examiner Name	Unassigned TENTONI	
				Attorney Docket Number	P86-28-03	

				U.S. PATENT DOCUMEN	TS		
Examiner Initials*	Cite No.1	U.S. Patent Do	Kind Code <sup>2</sup> (if known)	Name of Patentee or Applicant of Cited Document	Date of Pul Cited Do MM-DD	cument	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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LOT	B37	11/051,533		-Fletcher et al.	2/4/2005		
LBT	B38	4,512,848		Deckman et al.	4/23/198	35 -	
	B39	6,517,995	B1	Jacobenson et al.	2/11/200	)3 -	<del></del>
	B40	2004/0110856	A1	Young et al.	6/10/200	)4 -	
	B41	5,028,366		Harakal et al.	7/2/1991		
	B42	5,601,641		Stephens	2/11/199	)7 -	
<b>1</b>	B43	5,849,209		Kindt-Larsen et al.	12/15/19	98	
LBT	B44	5,849,222		Jen et al.	12/15/19	98	
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Sheet	4	of	6	Attorney Docket Number	P86-28-03		

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Cite No.'	Office 3	Foreign Patent Docu	ument Kind Code <sup>5</sup> (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	<u> </u>
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B45	wo	00/21689	ΑI	Chou et al.	4/20/2000		$\pm$
B46	JP	02-92603	Α	Kurikawa et al.	4/3/1990		+
B47	JP	02-24848	Α	Kamio	1/26/1990		$\vdash$
B48	wo	01/47003	Aa	Steiner et al.	6/28/2001		$\perp$
B49	wo	02/07199	ΑI	Chou	1/24/2002	3	$ar{L}$
B50	wo ·	2004/114016	Aa	Chou et al.	12/29/2004		+
B51	wo	99/05724	Αı	Chou et al.	2/4/1999		$\perp$
B52	wo	03/010289	Aa	Chou et al.	2/6/2003		
B53	wo	03/079416	Al	Chou	9/25/2003		I
B54	wo	03/099536	Al	Chou et al.	12/4/2003	-	$oxed{\bot}$
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Examiner Signature LEO B. TENTONI	Date Considered	08/02/2005
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INFO	RMATION	DISCLO	SURE	APPLICATION NUMBER	10/645,306			
STA	TEMENT B	Y APPL	ICANT	FILING DATE	08/21/2003			
				FIRST NAMED INVENTOR	Choi et al.			
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Sheet	5	of	6	Examiner Name	Unassigned TENTONI			
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OTHER PRIO	R ART -	NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
LBT	B55	Colburn et al., Step and Flash Imprint Lithography for sub-100 nm Patterning, Proceedings of SPIE Vol. 3997, pp. 453 - 457, 1/1/2000.	_
	B56	Johnson et al., Advances in Step and Flash Imprint Lithography, SPIE Microlithography Conference, 2/23/2003.	_
	B57	Heidari, Nanoimprint Lithography at the 6 in. Wafer Scale, J. Vac. Sci. Technol. B 18(6), pp. 3557 - 3560, 11/1/2000.	-
	858	Translation of Japanese Patent 02-92603 (APRIL 3, 1990).	-
	<b>B</b> 59	Translation of Japanese Patent 02-24848 (JANUARY 26, 1990).	-
	B60	Chou et al., Ultrafast and Direct Imprint of Nanostructures in Silicon, Nature, Col. 417, (June 2002), pp. 835-837, 6/1/2002.	-
	B61	Chou et al., Nanoimprint Lithography, Journal of Vacuum Science Technolgoy B 14(16), pp. 4129-4133, 11/1/1996.	-
	B62	Colburn et al., Development and Advantages of Step-and-Flash Lithography, Solid State Technology, 7/1/2001,	-
LeT	B63	Colburn et al., Characterization and Modeling of Volumetric and Mechanical Properties for Step and Flash Imprint Lithography Photopolymers, Journal of Vacuum Science Technology. Vol b. 19(6), 11/1/2001,	-

Examiner				Date	
Signature	LEO	В.	TENTONI	Considered	08/02/2005

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<sup>&</sup>lt;sup>1</sup> Applicant's unique ditation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending on the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450.. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Sheet 6 of 6				Examiner Name	Unassigned TENTONI	
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OTHER PRIOR	R ART -	NON PATENT LITERATURE DOCUMENTS	
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LBT	B64	Bailey et al., Step and Flash Imprint Lithography: Defect Analysis, Journal of Vacuum Science, B 19(6), pp. 2806-2810, 11/1/2001.	_
LBT	B65	Bailey et al., Step and Flash Imprint Lithography: Template Surface Treatment and Defect Analysis, Journal of Vacuum Science, B 18(6), pp. 3572-3577, 11/1/2000.	
LBT	B66	Schneider et al., Stripes of Partially Fluorinated Alkyl Chains: Dipolar Langmuir Monolayers (UNDATED).	
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Sheet 1 of 2			12	Group Art Unit	1732	
Sheet 1 of 2		Examiner Name	Tentoni, Leo B.			
				Attorney Docket Number	P86-28-03	

				U.S. PATENT DOCUMEN	TS	
Examine Initials*			Name of Patentee or Applicant     of Ched Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Unes, Whore Relevant Passages or Relevant Figures Appear	
LB.	T   C1	5,669,303	·	Maracas et al.	9/23/1997	
H	CZ	2002/0094496		Choi et al.	7/18/2002	
	c3	2004/0250945		Zheng et al.	12/16/2004	
	C4	2005/0037143	<del>                                     </del>	Chou et al.	2/17/2005	
V	C5	6,900,881	<del></del>	Sreenivasan et al.	5/31/2005	
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		·		Group Art Unit	1732
Sheet	2	of	2	Examiner Name	Tentoni, Leo B.
				Attorney Docket Number	P86-28-03

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Filing Date	08/21/2003				
First Named Inventor	Choi et al.				
Group Art Unit	<del>1763</del> 1732				
Examiner Name	Unassigned TENTONI				
Attorney Docket Number	P86/MII-46-28-03				

		•		U.S. PATENT DOCUMEN	TS	
Examiner Initials*	Cite No.'	U.S. Patent Document Kind Code <sup>2</sup> Number ( <i>il known</i> )		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
LBT	A1	4,267,212		Sakawaki	05-12-1981	
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<sup>&</sup>lt;sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO-Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>8</sup>Applicant is to place a check-mark here if English language Translation is attached.

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				Application Number	10/645,306	
INFO	<b>RMATION D</b>	ISC	LOSURE	Filing Date	08/21/2003	
STAT	<b>TEMENT BY</b>	APF	PLICANT	First Named Inventor	Choi et al.	
				Group Art Unit	<del>1763-</del> 1732	
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Sheet	2	of	5	Attorney Docket Number	P86/MII-46-28-03	

					PATENT DOCUMENTS			
Examiner Initials*	Cite No.	Office <sup>3</sup>	Foreign Patent Docum	Kind Code <sup>5</sup> (il known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	7*
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	A29	wo	01/53889	AI	Ling et al.	07-26-2001		#
4	A30	wo	01/63361	AI	Heidari et al.	08-30-2001		#
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				Application Number	10/645,306	
INF	ORMATION	DIS	CLOSURE	Filing Date	08/21/2003	
STA	TEMENT B	Y AF	PPLICANT	First Named Inventor	Choi et al.	
•				Group Art Unit	1703 1732	
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Sheet	3	of	5	Attorney Docket Number	P86/MII-46-28-03	

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LBT	AJZ	Hall, a division of Routledge, Chapman and Hall, Inc., 29 West 35 <sup>th</sup> Street, NY, NY 10001-2291.	_			
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INFO	DRMATION	I DISC	LOSURE	Filing Date	08/21/2003	
STA	TEMENT E	3Y APF	PLICANT	First Named Inventor	Choi et al.	
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		CHOI et al., "Methods for High-Precision Gap and Orientation Sensing Between a Transparent Template				
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Examiner Signature	LEO I	В,	TENTONI	Date Considered	08/02/2005

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